BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Estimate Cost Rs. **2000000.00**

Name of Work: Estimate for Maintenance of Water Supply Scheme in Ward No. 05, Byatarayanaprua Sub Division.

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	A) Rewinding								
1	Lifting of Submersible pump set as per Soecification and direction **(P. 56 / I. 10.3.21) PRED SR (2012-13)**	Each	20				**20**	850.00	**17000.00**
2	Transportation of pumping machineries (**P. 56 / I. 10.3.19) PRED SR (2012-13)**	Each	20				**20**	900.00	**18000.00**
3	Labour charges (over hauling) **P. No. 56 / I No.10.3.22 PRED SR (2012-13)**	Job	20				**20**	550.00	**11000.00**
4	**A) Repairs to Motor:** Rewinding of submersible pump sets with copper insulation wire of suitable gauge as per ISI specification with guarantee of 6 months. **PRED SR (2012-13) P No. 54 / I. No. 10.1) (Above 10 HP upto 20 HP add Rs.150/- for every ½ HP)**								
	B) 12.5 HP Motor		5				**5**	4750.00	**23750.00**
	upto 5 HP 2500.00								
	for 12.5 HP (150 x 15) 2250.00								
	Total 4750.00								
	C) For 15 HP Motor		15				15.00	3225.00	**48375.00**
	Rs. 3225.00								
	B) Replacement of Motor Parts:								
5	Starter (with one year Guarantee) **P No. 55 / I No. 10.3.3 PRED SR (2012-13)**	No.	20				**20**	5050.00	**101000.00**
6	Rotor (with one year Guarantee) **P No. 55 / I No. 10.3.6) PRED SR (2012-13)**	No.	20				**20**	4700.00	**94000.00**
7	Pump Bowls **P No. 44 / I No. 10.2.1) APRED SR (2010-11)**	No.	300				**300**	650.00	**195000.00**
8	Intermediate Piece (I.P) With IP Leaded Bronxe bush **P No. 44 / I No. 10.2.2) APRED SR (2010-11)**	No.	15				**15**	450.00	**6750.00**
9	Upper Flange **P. No. 56 / I No. 10.3.7 PRED SR (2012-13)**	No.	20				**20**	350.00	**7000.00**
10	Lower Housing **P. No. 56 / I No. 10.3.10 PRED SR (2012-13)**	No.	20				**20**	650.00	**13000.00**
11	Carbon Housing **P. No. 56 / I No.10.3.12 PRED SR (2012-13)**	No.	20				**20**	475.00	**9500.00**
12	Thrust bearing block assembly complete with Segment bearing pad.**P. No. 55 / I No.10.3.13 PRED SR (2012-13)**	No.	20				**20**	1150.00	**23000.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	C) **Replacement of pump parts:** The following main components of submersible pump sets requiring replacement.								
13	Oil Seal **P. No. 54 / I No.10.2.3 PRED SR (2012-13)**	No.	20				**20**	125.00	**2500.00**
14	Oil Seal Steel Bush **P. No. 54 / I No. 10.2.4 PRED SR (2012-13)**	No.	20				**20**	150.00	**3000.00**
15	Guide vane **P. No. 54 / I No. 10.2.5 PRED SR (2012-13)**	No.	400				**400**	175.00	**70000.00**
16	Impeller Shell moulded with aluminium Bronze) **P. No. 54 / I No. 10.2.6 PRED SR (2012-13)**	No.	400				**400**	425.00	**170000.00**
17	Discharge outlet (D.O) Bearing D.O Steel Bush **P. No. 55 / I No. 10.2.7 PRED SR (2012-13)**	No.	20				**20**	445.00	**8900.00**
18	D.O Bearing **P. No. 44 / I No. 10.2.7 PRED SR (2010-11)**	No.	10				**10**	250.00	**2500.00**
19	Steel Bush **P. No.55 / I No. 10.2.9 PRED SR (2012-13)**	No.	20				**20**	150.00	**3000.00**
20	Allen Screw **P. No.44 / I No. 10.2.9 RDPR SR (2010-11)**	No.	40				**40**	25.00	**1000.00**
21	Pump shaft made out of stainless steel Centreless ground with key way (upto 8 stages) **P. No. 55 / I No. 10.2.11 PRED SR (2012-13)**	No.	20				**20**	950.00	**19000.00**
22	Pump Key (Stainless Steel) **P. No. 45 / I No. 10.2.11 RDED SR (2010-11)**	No.	20				**20**	125.00	**2500.00**
23	Pump Couping (Stainless Steel) **P. No. 44 / I No. 10.2.12 RDED SR (2010-11)**	No.	10				**10**	250.00	**2500.00**
24	Non – return valve (NRV) assembly complete with rubber 'O' Ring **P. No. 55 / I No. 10.2.14 PRED SR (2012-13)**	No.	20				**20**	1350.00	**27000.00**
25	Cable Guard **P. No. 55 / I No. 10.2.15 PRED SR (2012-13)**	No.	20				**20**	150.00	**3000.00**
26	Strainer **P. No. 45 / I No. 10.2.15 RDED SR (2010-11)**	No.	20				**20**	150.00	**3000.00**
27	Brass Filter **P. No. 55 / I No. 10.2.17 PRED SR (2012-13)**	No.	20				**20**	250.00	**5000.00**
28	Labour Chargesw (Over Hauling Only) **P. No. 45 / I No. 10.2.18 PRED SR (2010-11)**	No.	20				**20**	450.00	**9000.00**
29	Re-erection charges of pumping machineries including overhauling and pointing **P. No. 56 / I No. 10.3.20 PRED SR (2012-13)**	Each	20				**20**	950.00	**19000.00**
30	Lock Ring **P. No. 45 / I No. 10.3.11 PREC SR (2010-11)**	Each	50				**50**	75.00	**3750.00**
32	a) Carbon Housing **P. No. 46 / I No. 10.3.12 APRDED SR (2010-11)**	Each	20				**20**	450.00	**9000.00**
32	Top Carbon/Ferrodo padding **P. No. 46 / I No. 10.3.12 APRDED SR (2010-11)**	Each	20				**20**	75.00	**1500.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
33	Stud and Nuts **P. No. 45 / I No. 10.3.15 PRED SR (2010-11)**	Each	50				**50**	50.00	**2500.00**
34	Bearing (Gunmetal) Centrifugal) Cast Aluminium Bronxe, Beaing bush **P. No. 46 / I No. 10.3.16 APRDED SR (2010-11)**	Each	20				**20**	375.00	**7500.00**
35	Circillps **P. No. 45 / I No. 10.3.17 PREC SR (2010-11)**	Each	50				**50**	50.00	**2500.00**
36	Motor Base With Pin **P. No. 46 / I No. 10.3.18 ARDED SR (2010-11)**	Each	20				**20**	450.00	**9000.00**
	Genaral Itmes								
37	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 12.50 HP 20 stage. **SE RDED Approved Rate PWD SR 2013-14 P. XXXXIII Sl No. 33 Kirloskar Pumps including of all taxes**	No							
	For Additional Motor 15 HP 30 Stage		2				**2**	75541.17	**151082.00**
38	Supplying & delivery at site brand new / Essen / Lotus sunsines/Adarsh/ Gk controls best indigenous make combine energy meter-cum-control panel board unit of size 1200 x 600 x 300 mm minimum mechanically strong and vermin and water proof the unit shall have two detachable doors suitable for operation on 3ph, 50Hz, 380/440 volts, AC supply with spring loaded latch locking with a key ribs should be provided inside the door , canopy apron and louvers ventilators shall be provided the combine energy mtr cum control panel board unit suitable for operation on 3ph, 50Hz, 380/440 AC supply shall be consisted etc,. completed T panel board shall be fabricated on single unit in the above components panel board for suitable pumpset above components	No.							
			1				**1**	14800.00	**14800.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
39	Fabricating supplying and mounting MS box of 16 SWG suitable for floor / wall mounting, fully weather proof with provision for better hear description, (providing with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primes paint and finally finished with approved colour enamelled metal paint etc,. complete box of 21600 sq cm (P.NO-530, I.NO-39 b, BWSSB SR 13-14)	Sqm							
	16SWG		1	1100.00	20.00		22000.00		
							22000.00	0.34	**7478.00**
	Basic Rate	0.33							
	3% area weightage	0.01							
	Total	**0.34**							
40	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 Volts. P. No. 49/ I No. 29-b(1) **4 Sqm mm of 56 strands 0.3mm dia Group - A KPWD Electrical SR 2010-11**	Mtr							
			1	1000.00			**1000.00**	185.00	**185000.00**
41	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications (P.NO - 5, I.NO - 2.4, PWD SR 13-14)	Cum							
			1	1500.00	0.45	0.75	506.25		
							506.25	223.66	**113228.00**
	Basic Rate	211.00							
	6% area weightage	12.66							
	Total	**223.66**							
42	Providing and installing at site of work 63mm (0.662) PVC Pipes of 6 kg / cm2 including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including jointing of approved type with all labour and lift charges, handling charges including encasing the pipe alround to a depth not less than 15cms with gravel or selected earth available from the excavation etc., complete (P.NO - 102, I.NO - 13.73.1, PWD SR 13-14)	Mtr							
	75 mm dia 6 KSC PVC pipe								
			1	1500.00			1500.00		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
							1500.00	352.98	**529470.00**
	Basic Rate	333.00							
	6% area weightage	19.98							
	Total	**352.98**							
43	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications (P.NO - 6, I.NO - 2.11, PWD SR 13-14)	Cum							
			Qty. Vide Item No.				**506.25**	59.36	**30051.00**
	Basic Rate	56.00							
	6% area weightage	3.36							
	Total	**59.36**							
44	KSRB 13.6.3-6 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) **50mm** nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 **P. 97 / I.13.37 PWD SR - 2012-13**	Each							
			9				**9**	1582.58	**14243.00**
	Basic Rate	1493.00							
	Area Weightage @ 6%	89.58							
	Total	**1582.58**							
45	Miscellaneous and Unforeseen Charges	L/S							**623.00**
								Total	**2000000.00**
Rupees Twenty Lakh(s) Only									

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.

2 This estimate is prepared as per C.S.R. of PWD 2013-14, PWD Elecrical 2010-11, PRED 2012-13 & SE-RDED approved Rate.

3 The provisions were made in this estimate are necessary and adequate.

4 This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Sub Division
Bangalore-24.

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division
Bangalore-92

Sanction for Rs. Administrative Approval Accorded for Rs 20.00 lakhs is accorded under head PR802 registered as CE No. 88 Dt: 28-11-14 Subject to Conditions contained in enclosed memo No...../.....Dr.....

AE/JE TA SE (BTP) CE (BTP)

Technical Sanction for Rs. 20.00L Twenty lakhs only P-1802 Registered as ... 52 ... 22.12.14 subject to conditions contained ... No: 288 Dt: 22.12.14

AE/JE 22.12 SE (BTP.D